

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Vignina 22313-1450 www.nspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,742	10/01/2001	Sascha Doekel	P 283720 4024US/CNT1	3608
909	7590 07/15/2003			
PILLSBUR P.O. BOX 10	Y WINTHROP, LLP		EXAMINER	
MCLEAN, VA 22102			KAM, CHIH MIN	
			ART UNIT	PAPER NUMBER
			1653 DATE MAILED: 07/15/2003	9

Please find below and/or attached an Office communication concerning this application or proceeding.

	A			
•	Application No.	Applicant(s)		
Office Action Comments	09/966,742	DOEKEL ET AL.		
Office Action Summary	Examiner	Art Unit		
	Chih-Min Kam	1653		
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet	with the correspondence address		
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatii - If the period for reply specified above is less than thirty (30) days - If NO period for reply is specified above, the maximum statutory i - Failure to reply within the set or extended period for reply will, by - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). Status	ION. FR 1.136(a). In no event, however, mayon. a reply within the statutory minimum of period will apply and will expire SIX (6) No statute, cause the application to become	v a reply be timely filed thirty (30) days will be considered timely. ONTHS from the mailing date of this communication.		
1) Responsive to communication(s) filed or	n			
2a)☐ This action is FINAL . 2b)☐	This action is non-final.			
3) Since this application is in condition for a closed in accordance with the practice un Disposition of Claims	allowance except for formal r nder <i>Ex parte Quayle</i> , 1935	natters, prosecution as to the merits is C.D. 11, 453 O.G. 213.		
4)⊠ Claim(s) <u>1-25</u> is/are pending in the applic	cation.			
4a) Of the above claim(s) is/are wit	hdrawn from consideration.			
5) Claim(s) is/are allowed.				
6) Claim(s) is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) 1-25 are subject to restriction an	d/or election requirement.			
Application Papers				
9)☐ The specification is objected to by the Exa	miner.			
10)☐ The drawing(s) filed on is/are: a)☐	accepted or b) objected to b	y the Examiner.		
Applicant may not request that any objection	to the drawing(s) be held in abo	eyance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on _	is: a)☐ approved b)☐	disapproved by the Examiner.		
If approved, corrected drawings are required	in reply to this Office action.			
12)☐ The oath or declaration is objected to by th	e Examiner.			
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for fo	reign priority under 35 U.S.C	C. § 119(a)-(d) or (f).		
a) All b) Some * c) None of:		•		
1. Certified copies of the priority docur	nents have been received.			
2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the application from the Internationa* See the attached detailed Office action for a	priority documents have been Bureau (PCT Rule 17.2(a)	en received in this National Stage		
14) Acknowledgment is made of a claim for dom				
a) The translation of the foreign language	e provisional application has	been received.		
Attachment(s)	-			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948 3) Information Disclosure Statement(s) (PTO-1449) Paper No	5) 5) Notice of	w Summary (PTO-413) Paper No(s) If Informal Patent Application (PTO-152)		
S. Patent and Trademark Office PTO-326 (Rev. 04-01) Office	e Action Summary	Part of Paper No. 9		

Art Unit: 1653

DETAILED ACTION

Page 2

Claim 21 is an improper dependent claim because the claim cites being dependent from claim 25, which claims the protein, while claim 21 claims a microorganism. To advance the prosecution, claim 21 is treated as being dependent from claim 20.

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U. S. C. 121:
 - I. Claims 1-13, drawn to a method for microbial production of Asp-Phe from the substrates L-Asp and L-Phe by contacting the substrates with a non-ribosomal dipeptide synthetase comprising two minimal modules connected by one condensation domain, in the presence of ATP, classified in class 514, subclass 2; and class 530, subclass 350.
 - II. Claims 14-21, drawn to a DNA fragment or a combination of DNA fragments which encode a non-ribosomal Asp-Phe dipeptide synthetase comprising two minimal modules connected by one condensation domain; and a recombinant microorganism containing the DNA fragment or the combination of DNA fragments, classified in class 435, subclasses 252.1; and class 536, subclass 23.2.
 - III. Claims 22-25, drawn to Asp-Phe dipeptide synthetase comprising two minimal modules connected by one condensation domain, wherein the N-terminal module of these modules recognizes L-Asp, and the C-terminal module of these modules recognizes L-Phe and is covalently bound at its N-terminal end to the condensation domain, classified in class 435, subclass 228.
- 2. The inventions are distinct, each from the other because of the following reasons:

Art Unit: 1653

The product of Invention II is distinct from the method of Invention I because the product of Invention II can be neither made by nor used in the method of Invention I.

The product of Invention III and the method of Invention I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, a DNA fragment coding for (Asp-Phe)_n in ribosomal fermentative route can be used to produce Asp-Phe (page 2, lines 21-28 of the specification).

The protein of Invention III is related to the DNA and recombinant microorganism of Invention II because the protein can be produced by the expression of DNA in the microorganism. The inventions are distinct because they are physically and functionally distinct chemical entities, and the protein can be made by another process such as chemical synthesis. Furthermore, the polynucleotide can be used for a process other than the production of the protein such as nucleotide hybridization assay.

Because Inventions I-III are distinct for the reasons given above and have acquired a separate status in the art as shown by different classification and their recognized divergent subject matter, and because Inventions I-III require different searches but are not co-extensive, examination of these distinct inventions would pose a serious burden on the examiner and therefore restriction for examination purposes as indicated is proper.

Art Unit: 1653

Applicant is advised that the reply to this requirement to be complete must include an

Page 4

election of the invention to be examined even though the requirement be traversed (37 CFR

1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a petition under 37 CFR

1.48(b) and by the fee required under 37 CFR 1.17(i).

A telephone call was made to Richard Steinberg on July 14, 2003 to request an oral

election to the above restriction requirement, but did not result in an election being made.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chih-Min Kam whose telephone number is (703) 308-9437. The

examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Christopher Low can be reached on (703) 308-2923. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 308-0294 for regular

communications and (703) 308-4227 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0196.

Chih-Min Kam, Ph. D. CMK Patent Examiner

> CHRISTOPHER S. F. LOW SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600

Chin by her Sh

Art Unit: 1653

4-24

July 14, 2003